

## **CHAPTER 9: COMPETITIVE IMPACT ANALYSIS**

### **9.1 INTRODUCTION**

Competitive Impact relates to any change in the concentration of market power due to the effects of standards. New standards may alter industry competitiveness by favoring a company's proprietary technology or reinforcing its competitive advantage or by making it economically unattractive for companies to remain in the marketplace at all or as separate entities. Any lessening of competition can raise prices and negatively impact consumers. Both the Department of Energy and the Department of Justice are interested in assessing any potential impact that a new standard may have on competition.

The Framework (Chapter 2) separates the Competitive Impact Analysis from the Manufacturer Impact Analysis (Chapter 8). The two are closely related since the inputs to the Competitive Impact analysis, primarily financial impacts, come directly from the MIA.

### **9.2 METHODOLOGY**

During manufacturer interviews, we asked manufacturers to describe likely competitive responses to new standards, focusing specifically on whether any firms would likely enter or exit a market, merge, or gain a significant competitive advantage. To the extent possible, we used the GRIM to evaluate industry-wide financial indicators such as return on invested capital and net cash flow that can indicate whether the market can sustain the current number of competitive firms. Since the GRIM cannot simulate changes in price due to lessening of competition, we could not assess impacts on consumers.

### **9.3 RESULTS**

None of the seven large manufacturers we interviewed expected new standards to place them at a significant competitive advantage or disadvantage. Most small manufacturers expressed this concern, but the loss of small manufacturers from the market will do little to reduce competition, even at the regional and local level.

The major manufacturer manufacturers do expect companies to continue to merge and large manufacturers to continue to acquire smaller manufacturers, and they expect new efficiency standards to accelerate or reinforce that trend. Since much of the redesign and testing costs associated with new standards could be shared among merged firms, there is an incentive to merge and reduce the burden on the combined company. Furthermore, manufacturers will less ample research and product development resources would seek partners with greater access to those resources to be able to respond to the requirements of the standard in a timely and effective manner.

The GRIM does suggest that standard levels of TSL2, TSL3, and TSL4 place a significant strain on the cash flows and return on invested capital of firms and business units with higher operating costs whose profits depend to a great extent on the sale of premium products. It is possible, therefore, that a new standard set at any of those levels will stimulate firms to sell their air conditioning assets to restore their company's ROIC or avoid the drain on cash flow.

Refer to Chapter 8, the MIA, for more detailed information that influences the Competitive Impact Assessment. Section 8.5, Subgroup Impacts, is particularly relevant since it provides insight into the competitive dynamics between major manufacturers based on their cost structure and approach to market.